

INTERSTATE COMMERCE COMMISSION  
WASHINGTON

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INVESTIGATION NO. 3028  
NORTHWESTERN PACIFIC RAILROAD COMPANY  
REPORT IN RE ACCIDENT  
NEAR DOS RIOS, CALIF., ON  
SEPTEMBER 30, 1946

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SUMMARY

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Railroad: Northwestern Pacific

Date: September 30, 1946

Location: Dos Rios, Calif.

Kind of accident: Head-end collision

Trains involved: Work : Freight

Train numbers: Work Extra 114 : Extra 2801 East

Engine numbers: 114 : 2801

Consists: 8 work-equipment : 3 cars, caboose  
cars, coach

Estimated speeds: 18 m. p. h. : 12 m. p. h.

Operation: Timetable and train orders

Track: Single; 5° curve; 0.484 percent  
ascending grade westward

Weather: Cloudy

Time: 4:50 p. m.

Casualties: 1 killed; 7 injured

Cause: Freight train entering working limits  
of work extra without authority

Recommendation: That the Northwestern Pacific  
Railroad Company install an adequate  
block system

INTERSTATE COMMERCE COMMISSION

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INVESTIGATION NO. 3028

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS  
UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910.

NORTHWESTERN PACIFIC RAILROAD COMPANY

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November 12, 1946

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Accident near Dos Rios, Calif., on September 30, 1946, caused  
by a freight train entering the working limits of a  
work extra without authority.

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REPORT OF THE COMMISSION<sup>1</sup>

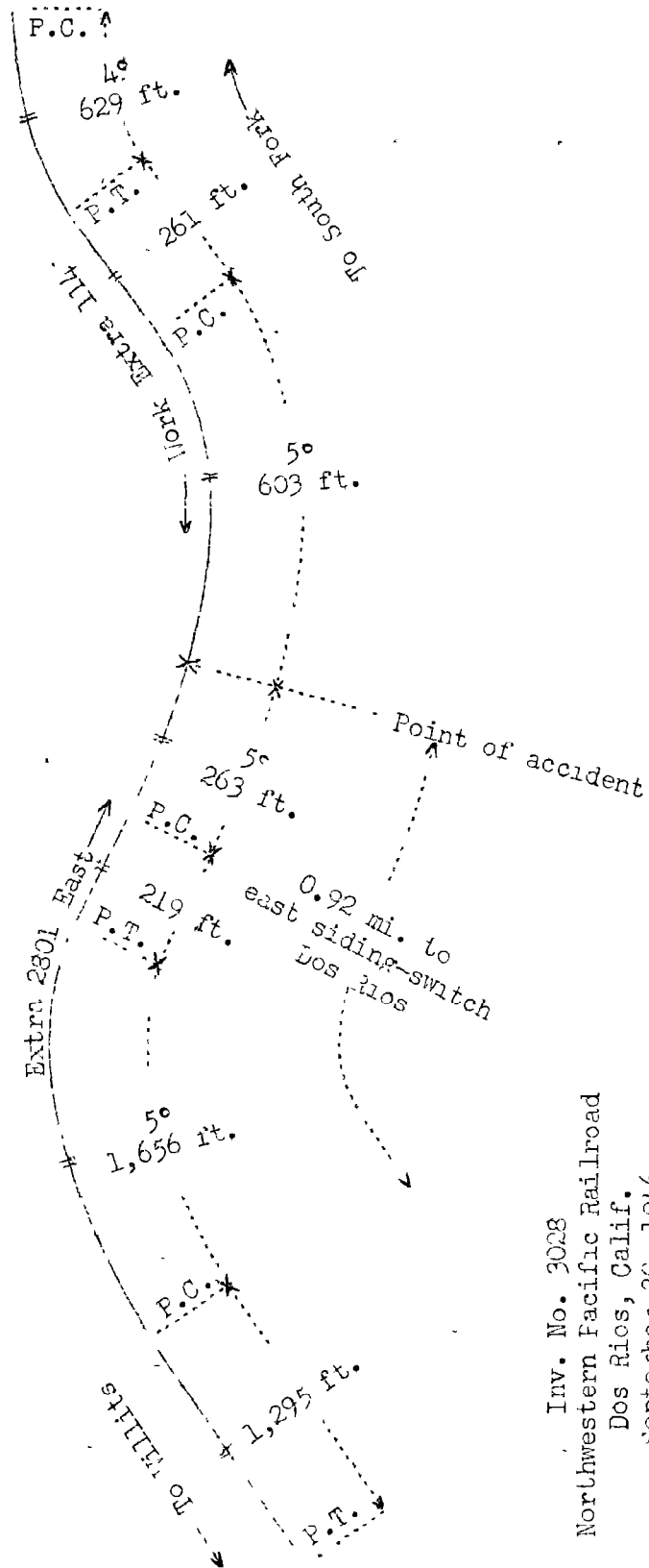
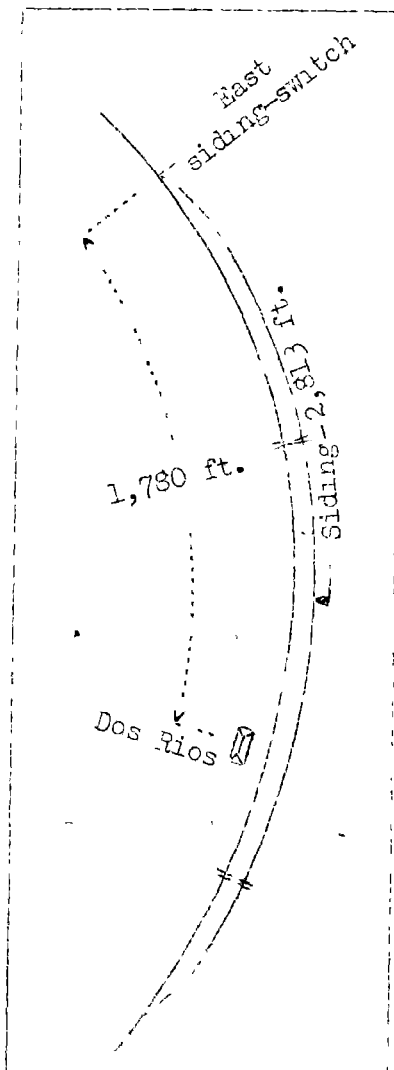
PATTERSON, Commissioner:

On September 30, 1946, there was a head-end collision between a work train and a freight train on the Northwestern Pacific Railroad near Dos Rios, Calif., which resulted in the death of one employee, and the injury of seven employees. This accident was investigated in conjunction with a representative of the Railroad Commission of California.

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<sup>1</sup>Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.

- o South Fork, Calif. 28.2 mi.
- o Alderpoint 33.6 mi.
- o Nashmead 7.7 mi.
- X Point of accident 1.3 mi.
- o Dos Rios 27.0 mi.
- o Willits, Calif.



Inv. No. 3028  
 Northwestern Pacific Railroad  
 Dos Rios, Calif.  
 September 30, 1946

Location of Accident and Method of Operation

This accident occurred on the South Fork Subdivision, which extends between South Fork and Willits, Calif., 97.8 miles, a single-track line over which trains are operated by timetable and train orders. There is no block system in use. At Dos Rios, 70.8 miles west of South Fork, a siding 2,813 feet in length parallels the main track on the south. The east switch of this siding is 1,780 feet east of the station. The accident occurred on the main track 0.92 mile east of the east siding-switch. From the east there are, in succession, a 4° curve to the left 629 feet in length, a tangent 261 feet and a 5° curve to the right 603 feet to the point of accident and 263 feet westward. From the west there are, in succession, a tangent 1,295 feet in length, a 5° curve to the right 1,656 feet, a tangent 219 feet and the curve on which the accident occurred. At the point of accident the grade is 0.484 percent ascending westward.

Operating rules read in part as follows:

210. \* \* \*

\* \* \*

Train orders \* \* \* must be shown by engineer to fireman, and, when practicable, to forward brakeman. Brakeman and firemen must read and return them, comparing their understanding of the orders with conductor or engineer, \* \* \* and should there be occasion to do so, remind conductor or engineer of their contents.

FORMS OF TRAIN ORDERS

\* \* \*

S-H.

Work Extra.

- (1) ENG 292 WORKS EXTRA SIX FORTY FIVE 645 AM  
UNTIL FIVE FORTY FIVE 545 PM BETWEEN D AND E

The work extra, whether standing or moving, must protect itself against extra trains within the work limits in both directions.

This may be modified by adding:

\* \* \*

- (5) NOT PROTECTING AGAINST EXTRA TRAINS EXCEPT PROTECTS AGAINST EXTRA 73 EAST AFTER TEN THIRTY 1030 AM AND EXTRA 85 WEST AFTER ONE THIRTY 130 PM

The work extra will not protect against the extra trains excepted until the times specified and the extra trains excepted must not enter the work limits before those times. \* \* \*

\* \* \*

Between points, respectively, 64.2 miles east and 24.8 miles west of the point of accident the maximum authorized speed for passenger trains is 25 miles per hour and for freight trains, 18 miles per hour.

#### Description of Accident

At Alderpoint, 42.6 miles east of Dos Rios, the crew of Extra 114 West, a west-bound work-equipment train, received copies of train order No. 215 reading in part as follows:

ENG 114 WORKS EXTRA FOUR ONE 401 PM until SEVEN ONE 701 PM BETWEEN NASHMEAD AND DOS RIOS \* \* \* NOT PROTECTING AGAINST EXTRA TRAINS EXCEPT PROTECTS AGAINST EXTRA 2801 EAST AFTER FIVE ONE 501 PM

Nashmead is 9 miles east of Dos Rios. Extra 114 West departed from Alderpoint, the last open office, at 2:05 p. m. Work Extra 114, consisting of engine 114, 8 work-equipment cars and one coach, in the order named, departed westward from Nashmead about 4:20 p. m., and while moving at an estimated speed of 18 miles per hour it collided with Extra 2801 East at a point 0.92 mile east of the east-siding switch at Dos Rios.

At Willits, 27 miles west of Dos Rios, the crew of Extra 2801 East, an east-bound freight train, received copies of train order No. 215. This train, consisting of engine 2801, 3 cars and a caboose, departed from Willits, the last open office, at 3:35 p. m., passed the east siding-switch at Dos Rios, about 4:47 p. m., where it was required to wait until 5:01 p. m. unless Work Extra 114 was into clear on the siding, and while moving at an estimated speed of 12 miles per hour it collided with Work Extra 114.

The front driving wheels of the engine of Extra 2801 East and the caboose of this train were derailed. The engines of both trains were badly damaged, and the cars of Work Extra 114 and the caboose of Extra 2801 East were considerably damaged.

The weather was cloudy at the time of the accident, which occurred about 4:50 p. m.

The front brakeman of Work Extra 114 was killed. The engineer and the fireman of Work Extra 114, and the engineer, the fireman, the conductor, the front brakeman and the flagman of Extra 2801 East were injured.

During the 30-day period preceding the day of the accident, the average daily movement in the vicinity of the point of accident was 6.76 trains.

#### Discussion

The crew of each train held copies of train order No. 215, which authorized Work Extra 114 to work from 4:01 p. m. until 7:01 p. m. between Nashmead and Dos Rios without protecting against extra trains, except to provide protection against Extra 2801 East after 5:01 p. m. Under the rules, Extra 2801 East was required not to proceed east of the fouling point of the east siding-switch at Dos Rios prior to 5:01 p. m., unless Work Extra 114 was into clear on the siding. Extra 2801 East passed the east siding-switch at Dos Rios about 4:47 p. m. and collided with Work Extra 114 at a point 0.92 mile east of the switch. Work Extra 114 was en route westward to Dos Rios, where it would have entered the siding to clear the main track for Extra 2801 East.

As Work Extra 114 was approaching the point where the accident occurred the speed was about 18 miles per hour. The enginemen and the front brakeman were maintaining a lookout ahead. The first these employees knew of anything being wrong was when the engineer saw the engine of Extra 2801 East about 300 feet distant. Then the engineer moved the brake valve to emergency position, but the collision occurred before the train could be stopped. The front brakeman was killed.

The crew of Extra 2801 East received copies of train order No. 215 at Willits, 27 miles west of Dos Rios, about 1 hour 40 minutes prior to the time the accident occurred. At that time each member of the crew read the train order. They understood that their train was required not to pass the fouling point of the east siding-switch at Dos Rios prior to 5:01 p. m. As Extra 2801 East was approaching Dos Rios the enginemen were maintaining a lookout ahead. The

members of the train crew were in the caboose. Each member of the crew overlooked the requirements of the train order, and the enginemen were not aware of anything being wrong until the fireman saw the engine of Work Extra 114 a few hundred feet distant. Then the fireman called a warning to the engineer, who immediately moved the brake valve to emergency position. The speed of Extra 2801 East was about 12 miles per hour when the collision occurred.

Because of an embankment and vegetation on the inside of the curve on which the accident occurred, the view of the point where the accident occurred from an engine moving in either direction is materially restricted.

Trains are operated in this territory by timetable and train orders only. If an adequate block system had been in use in this territory, these opposing trains would not have been permitted to occupy the same block simultaneously.

#### Cause

It is found that this accident was caused by a freight train entering the working limits of a work extra without authority.

#### Recommendation

It is recommended that the Northwestern Pacific Railroad Company install an adequate block system.

Dated at Washington, D. C. this twelfth day of November, 1946.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. PARTEL,  
Secretary.